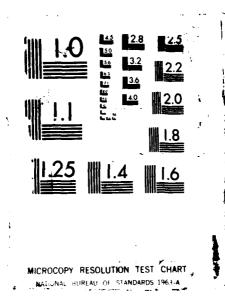
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AFWAL-TR-86-4006 Volume VIII Part 29

AD-A182 656

INTEGRATED INFORMATION
SUPPORT SYSTEM (IISS)
Volume VIII - User Interface Subsystem
Part 29 - Text Editor Product Specification



General Electric Company Production Resources Consulting One River Road Schenectady, New York 12345



Final Report for Period 22 September 1980 - 31 July 1985 November 1985

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This report has been reviewed by the Office of Public Affairs (ASD/PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report/has been reviewed and is approved for publication.

DAVID L. JUDION! PROJECT MANAGER

AFWAL/MLTC /

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5 Gug

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AFWAL/MLTC

WRIGHT PATTERSON AFB OH 45433

DATE DATE

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Vol VIII - User Interface Subsystem
Part 29 - Text Editor Product Specification

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PREFACE

This product specification covers the work performed under Air Force Contract F33615-80-C-5155 (ICAM Project 6201). This contract is sponsored by the Materials Laboratory, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio. It was administered under the technical direction of Mr. Gerald C. Shumaker, ICAM Program Manager, Manufacturing Technology Division, through Project Manager, Mr. David Judson. The Prime Contractor was Production Resources Consulting of the General Electric Company, Schenectady, New York, under the direction of Mr. Alan Rubenstein. The General Electric Project Manager was Mr. Myron Hurlbut of Industrial Automation Systems Department, Albany, New York.

Certain work aimed at improving Test Bed Technology has been performed by other contracts with Project 6201 performing integrating functions. This work consisted of enhancements to Test Bed software and establishment and operation of Test Bed hardware and communications for developers and other users. Documentation relating to the Test Bed from all of these contractors and projects have been integrated under Project 6201 for publication and treatment as an integrated set of documents. The particular contributors to each document are noted on the Report Documentation Page (DD1473). A listing and description of the entire project documentation system and how they are related is contained in document FTR620100001, Project Overview.

The subcontractors and their contributing activities were as follows:

TASK 4.2

Subcontractors	Role	
Boeing Military Aircraft Company (BMAC)	Reviewer	
D. Appleton Company (DACOM)	Responsible for IDEF support, state-of-the-art literature search	
General Dynamics/ Ft. Worth	Responsible for factory view function and information models	

Subcontractors

Role

Illinois Institute of Technology

Responsible for factory view function research (IITRI) and information models of small and medium-size business

North American Rockwell

Reviewer

Northrop Corporation

Responsible for factory view function and information

models

Pritsker and Associates

Responsible for IDEF2 support

SofTech

Responsible for IDEFO support

TASKS 4.3 - 4.9 (TEST BED)

Subcontractors

Role

Boeing Military Aircraft Company (BMAC) Responsible for consultation on applications of the technology and on IBM computer technology.

Computer Technology Associates (CTA)

Assisted in the areas of communications systems, system design and integration methodology, and design of the Network Transaction Manager.

Control Data Corporation (CDC)

Responsible for the Common Data Model (CDM) implementation and part of the CDM design (shared with DACOM).

D. Appleton Company (DACOM)

Responsible for the overall CDM Subsystem design integration and test plan, as well as part of the design of the CDM (shared with CDC). DACOM also developed the Integration Methodology and did the schema mappings for the Application Subsystems.

Subcontractors	Role
Digital Equipment Corporation (DEC)	Consulting and support of the performance testing and on DEC software and computer systems operation.
McDonnell Douglas Automation Company (McAuto)	Responsible for the support and enhancements to the Network Transaction Manager Subsystem during 1984/1985 period.
On-Line Software International (OSI)	Responsible for programming the Communications Subsystem on the IBM and for consulting on the IBM.
Rath and Strong Systems Products (RSSP) (In 1985 became McCormack & Dodge)	Responsible for assistance in the implementation and use of the MRP II package (PIOS) that they supplied.
SofTech, Inc.	Responsible for the design and implementation of the Network Transaction Manager (NTM) in 1981/1984 period.
Software Performance Engineering (SPE)	Responsible for directing the work on performance evaluation and analysis.
Structural Dynamics Research Corporation (SDRC)	Responsible for the User Interface and Virtual Terminal Interface Subsystems.

Prime contractors under other projects who have contributed to Test Bed Technology, their contributing activities and responsible projects are as follows:

Contractors	ICAM Project	Contributing Activities
Boeing Military Aircraft Company (BMAC)	1701, 2201, 2202	Enhancements for IBM node use. Technology Transfer to Integrated Sheet Metal Center (ISMC)

Contractors	ICAM Project	Contributing Activities
Boeing Military Aircraft Company (BMAC)	1701, 2201, 2202	Enhancements for IBM node use. Technology Transfer to Integrated Sheet Metal Center (ISMC)
Control Data Corporation (CDC)	1502, 1701	IISS enhancements to Common Data Model Processor (CDMP)
D. Appleton Company (DACOM)	1502	IISS enhancements to Integration Methodology
General Electric	1502	Operation of the Test Bed and communications equipment.
Hughes Aircraft Company (HAC)	1701	Test Bed enhancements
Structural Dynamics Research Corporation (SDRC)	1502, 1701, 1703	IISS enhancements to User Interface/Virtual Terminal Interface (UI/VTI)
Systran	1502	Test Bed enhancements. Operation of Test Bed.

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SECTION 1

SCOPE

1.1 Identification

This specification establishes the detailed design of a computer program identified as the Text Editor, hereinafter referred to as the TE. The TE is one configuration item of the Integrated Information Support System (IISS) User Interface (UI).

1.2 Functional Summary

The TE provides the user with the ability to edit a file in a manner consistent with the User Interface. Editing functions such as inserting, deleting, moving and replacing text are available.

SECTION 2

DOCUMENTS

2.1 Reference Documents

- [1] Structural Dynamics Research Corporation, Application Interface Product Specification, PS 620144700, 1 November 1985.
- [2] Structural Dynamics Research Corporation, Forms

 <u>Driven Form Editor Product Specification</u>,

 PS 620144402 , 1 November 1985.
- [3] Structural Dynamics Research Corporation, Forms
 Language Compiler Product Specification,
 PS 620144401, 1 November 1985.
- [4] Structural Dynamics Research Corporation, Form Processor Product Specification, PS 620144200, 1 November 1985.
- [5] Structural Dynamics Research Corporation, Rapid Application Generator Product Specification, PS 620144502, 1 November 1985.
- [6] Structural Dynamics Research Corporation, Report Writer Product Specification, PS 620144501, 1 November 1985.
- [7] Structural Dynamics Research Corporation, <u>User Interface Services Product Specification</u>, PS 620144100 , 1 November 1985.
- [8] Structural Dynamics Research Corporation, Virtual Terminal Product Specification, PS 620144300, 1 November 1985.
- [9] Structural Dynamics Research Corporation, <u>Text</u>
 <u>Editor Development Specification</u>, DS 620144600B,

 1 November 1985.
- [10] Structural Dynamics Research Corporation, <u>Text</u>
 <u>Editor User Manual</u>, UM 620144600B, 1 November
 1985.

[11] Structural Dynamics Research Corporation, <u>Text</u>
<u>Editor Unit Test Plan</u>, UTP620144600, 1 November
1985.

2.2 Terms and Abbreviations

Buffer Name: the default file in which the buffer will be saved if no file is given on a save command.

Current Cursor Position: the position of the cursor before an edit command or function is issued in the text editor.

Cursor Position: the position of the cursor after any command is issued.

Cut and Paste Buffer: where deleted lines go and the paste and fill edit commands get their data.

Display Start Line: the first line in the buffer to be displayed.

Display Size: the number of lines used in the edit area.

Field: two dimensional space on a terminal screen.

Field Pointer: indicates the ITEM which contains the current cursor position.

Form Processor: (FP), subset of the IISS User Interface that consists of a set of callable execution time routines available to an application program for form processing.

Form Processor Text Editor: (FPTE), subset of the Form Processor that consists of software modules that provide text editing capabilities to all users of applications that use the Form Processor.

IISS Function Screen: the first screen that is displayed after logon. It allows the user to specify the function he wants to access and the device type and device name on which he is working.

Integrated Information Support System: (IISS), a test computing environment used to investigate, demonstrate and test the concepts of information management and information integration in the context of Aerospace Manufacturing. The IISS addresses the problems of integration of data resident on heterogeneous data bases supported by heterogeneous computers interconnected via a Local Area Network.

Item: non-decomposable area of a form in which hard-coded descriptive text may be placed and the only defined areas where user data may be input/output.

Message: descriptive text which may be returned in the standard message line on the terminal screen. They are used to warn of errors or provide other user information.

Message Line: a line on the terminal screen that is used to display messgaes.

Operating System: (OS), software supplied with a computer which allows it to supervise its own operations and manage access to hardware facilities such as memory and peripherals.

Paging and Scrolling: a method which allows a form to contain more data than can be displayed with provisions for viewing any portion of the data buffer.

<u>Previous Cursor Position</u>: the position of the cursor when the previous edit command was issued.

<u>Previous</u> <u>Edit Command</u>: the function key pressed before the current one.

Select Line: one terminus of the select range.

Select Mode: when on, certain commands will be executed over the lines in the selected range. The commands are DELETE LINE, and replace.

Text Editor: (TE), subset of the IISS User Interface that consists of a file editor that is based on the text editing functions built into the Form Processor.

Top of file: the first line of the buffer.

User Interface: (UI), IISS subsystem that controls the user's terminal and interfaces with the rest of the system. The UI consists of two major subsystems: the User Interface Development System (UIDS) and the User Interface Management System (UIMS).

User Interface Development System: (UIDS), collection of IISS User Interface subsystems that are used by applications programmers as they develop IISS applications. The UIDS includes the Form Editor and the Application Generator.

User Interface Services: (UIS), subset of the IISS User Interface that consists of a package of routines that aid users in controlling their environment. It includes message management, change password, and application definition services.

Virtual Terminal: (VT), subset of the IISS User Interface that performs the interfacing between different terminals and the UI. This is done by defining a specific set of terminal features and protocols which must be supported by the UI software which constitutes the virtual terminal definition. Specific terminals are then mapped against the virtual terminal software by specific software modules written for each type of real terminal supported.

SECTION 3

REQUIREMENTS

3.1 Structural Description

The Text Editor is an IISS application and as such can be invoked from the IISS Function Screen. It provides IISS users with file editing capabilities.

The Text Editor has two basic modes, edit and command. Edit mode is used most often and consists of entering text and using key commands called functions. The command mode is entered by pressing the «COMMAND» key in the edit mode. The command mode is exited by completing a command or by pressint the «QUIT» key.

Text files are input through the host operating system's file access method, modified by the TE's user, and then written back to the file. Depending on the host this may overwrite the old version or create a new version of the file.

The detailed structure of the Text Editor is illustrated in section 3.10.

3.2 Functional Flow

Figure 3-1 is a data flow diagram of the Text Editor.

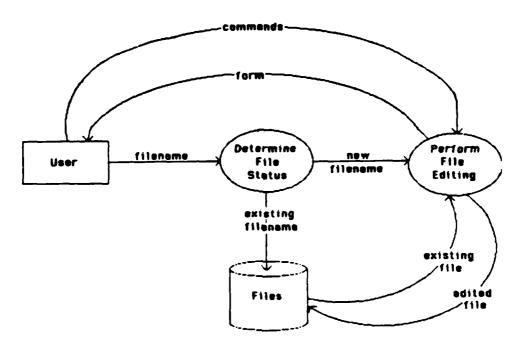


Figure 3-1 Text Editor Data Flow

3.3 Interfaces

Figure 3-2 describes the structure of the TE interfaces.

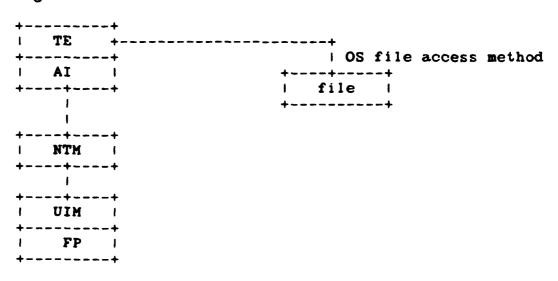


Figure 3-2 Text Editor Interfaces

3.3.1 Application Interface

The TE interfaces with the Form Processor through calls to the Application Interface (AI). The AI routines translate the application request into the NTM message format and then send the message that contains the application requiest data to the User Interface Monitor.

3.3.2 UIM

The UIM, which is the main control program for the Form Processor, calls the appropriate FP routine when a message is received from the Text Editor. The UIM then returns the output parameters to the TE.

3.3.3 NTM

The Text Editor application must also use the NTM initialization routine, INITAL and the NTM termination routine, TRMNAT.

3.4 Program Interrupts

This section does not apply to the detailed design of the Text Editor.

3.5 Timing and Sequencing Description

The TE is initiated through the IISS Function Screen presented to the user after correctly logging on to the IISS. The TE accepts input from and returns output to the user's terminal via defined forms. The TE permits the user to load files from host operating system and modify and save them.

3.6 Special Control Features

The detailed design of the Text Editor does not include any special control features as defined in the ICAM Documentation Standards manual.

3.7 Storage Allocation

The Text Editor executable is 163 blocks.

3.7.1 Data Base Definition

3.7.1.1 File Descriptions

1. FILE NAME: user specified

PURPOSE: This is the file that is modified by the user of the Text Editor.

DECLARATION:

char line[79];

3.8 Object Code Creation

All TE modules were compiled using a C compiler developed by Interactive Software under VAX/VMS.

3.9 Adaptation Data

The C source modules for the Text Editor can be compiled using any UNIX version 7 compatible C compiler.

3.10 Detailed Design Description

3.10.1 Main Program List

The following is a list of all "Main Programs" which are modules that are not called by any other module being documented here. These modules are either program entry points or, if they are hooked into another set of programs via subroutine calls, they are the points the external programs can call and therefore enter through. To differentiate between the two types of entry points, look at the individual Module Documentation (section 3.10.8) and look at Module Type for each of the Main Program modules listed. Note whether the routine is a Program, Subroutine, or Function. If it is a Program, it is truly a main program entry point. If not, then it is merely called by other programs not being documented here.

TEXT EDITOR Main Program List

Module Name

Purpose

TE/MAIN

MAIN MODULE FOR TEXT EDITOR

3.10.2 Module List

The following is a list of all the modules being documented here along with their purpose. Each module has a unique name, no matter what language it was written in.

TEXT EDITOR Module List

Module Name

Purpose

CLEAR

CLEAR BUFFER

EDITCI

EDIT CALLABLE INTERFACE

EDITCI/ADDNODE ADD NODE

EDITCI/CMDLIST

COMMAND LIST

EDITCI/CMDMENU COMMAND MENU

EDITCI/COMMAND COMMAND FUNCTION

EDITCI/CUT CUT FUNCTION

EDITCI/DELLINE

DELETE LINE

EDITCI/DELNODE

DELETE NODE

EDITCI/DOCMD DO A COMMAND

EDITCI/EDIT EDIT LOOP

EDITCI/FILL PASTE WITH FILL FUNCTION

EDITCI/FREENODE

FREE NODE

EDITCI/FRSTPAGE FIRST PAGE

EDITCI/GETNODE GET NODE

EDITCI/INDEX FIND INDEX OF SUBSTRING

EDITCI/INLINE INSERT LINE

EDITCI/LASTPAGE

LAST PAGE

EDITCI/MIDLINE

MIDLINE BREAK FUNCTION

EDITCI/NEWLINE NEW LINE

EDITCI/NXTLINE NEXT LINE

TEXT EDITOR Module List

Module Name Purpose

EDITCI/NXTPAGE NEXT PAGE

EDITCI/NXTVAL NEXT VALUE OF COMMAND LINE

EDITCI/PFSRCH CONTINUE SEARCH FUNCTION

EDITCI/PRVLINE PREVIOUS LINE

EDITCI/PRVPAGE PREVIOUS PAGE

EDITCI/PUTDEF PUT DEFAULTS

EDITCI/QUIT QUIT FUNCTION

EDITCI/RETRN RETURN

EDITCI/SELECT SELECT LINES FUNCTION

EDITCI/SPLIT SPLIT A LINE

EDITCI/TMPCPY TEMPORARY COPY

EDITCI/YANK PASTE FUNCTION

LOAD LOAD A FILE

MARGIN SET MARGINS

NAME THE BUFFER

REPEAT FUNCTION/COMMAND

REPLACE COMMAND

SAVE SAVE FILE

SEARCH SEARCH COMMAND

TE/MAIN MAIN MODULE FOR TEXT EDITOR

3.10.3 External Routines List

The following is a list of all routines or functions not documented here that are called by modules that are documented here. The first caller, in alphabetical order, is listed as well. The specification in which any module is documented may be found in the Module Documentation Index (Document Number CM 620100001). See section 3.10.6 for a list of the modules that call each of these external routines.

TEXT EDITOR External Routines List

Module Name	First User
ABORT	EDITCI/INLINE
ADDFRM	EDITCI/CMDLIST
ATOI	REPEAT
ESCPY	EDITCI
FCLOSE	LOAD
FGETS	LOAD
FOPEN	LOAD
FWRITE	SAVE
GDATA	EDITCI/COMMAND
GETCUR	EDITCI/CMDLIST
GETMORE	EDITCI
GPAGE	EDITCI/CMDLIST
GWINDO	EDITCI/CMDLIST
INITAL	TE/MAIN
INITFP	TE/MAIN
ISPRINT	EDITCI/EDIT
MALLOC	EDITCI/GETNODE
MEMCMP	EDITCI/COMMAND
MEMCPY	ELITCI/CHDMENU
MEMSET	EDITCI/SELECT
OISCR	EDITCI/QUIT
PDATA	EDITCI/EDIT
PMSGLC	EDITCI/CMDLIST
PMSGLS	EDITCI/CMDLIST
PRINTF	EDITCI/INLINE
PUTATT	EDITCI/COMMAND
PUTCUR	EDITCI/COMMAND
PUTLOC	EDITCI/EDIT
RMVPAG	EDITCI/CMDMENU
STRCAT	REPLACE
STRCPY	EDITCI/PUTDEF
STRLEN	EDITCI
STRNCAT	REPLACE EDITCI/EDIT
STRNCMP STRUPC	EDITCI/EDIT EDITCI/DOCMD
TERMFP	TE/MAIN
TOUPPER	CLEAR
TRMNAT	TE/MAIN
IVUUVI	IL/ DAIN

3.10.4 Include File List

The following is a list of all include files called in by modules being documented here. Each include file has a unique name regardless of the language being used. The purpose of each include file is listed as well. A more complete description of each include file is given in section 3.10.9. The purpose listed is the one that is in the source code of the include file.

A purpose of "**** PURPOSE NOT FOUND BY STRIPPER **** indicates that a purpose statement was not written into the include file itself. The most common reason for this is that the include file comes from system libraries that were not developed by the project, such as 'C' libraries that are provided with the 'C' compiler.

See section 3.10.6 for a set of lists which show all the modules which call in each of these include files.

TEXT EDITOR Include File List

File Name	Purpose	
CTYPE	**** PURPOSE NOT FOUND BY STRIPPER ****	
FPCODE	FORM PROCESSOR RETURN CODES	
FPD	FORM PROCESSOR DATA	
FPPARM	FORM PROCESSOR PARAMETERS	
NTM	NTM INTERFACE INCLUDE FILE	
STDIO	**** PURPOSE NOT FOUND BY STRIPPER ****	
STDTYP	STANDARD TYPE DEFINITIONS	

3.10.5 Where Include File Used List

The following lists each include file from 3.10.4 and all the modules documented in this specification which include them. The purpose of each module is listed as well.

TEXT EDITOR Where-include-file-used List

Include	Module	Module
File	Name	Purpose

SAVE

CTYPE

CLEAR BUFFER CLEAR EDITCI EDIT CALLABLE INTERFACE EDITCI/AD ADD NODE EDITCI/CM COMMAND LIST EDITCI/CM COMMAND MENU EDITCI/CO COMMAND FUNCTION EDITCI/CU CUT FUNCTION EDITCI/DE DELETE LINE EDITCI/DE DELETE NODE EDITCI/DO DO A COMMAND EDITCI/ED EDIT LOOP EDITCI/FI PASTE WITH FILL FUNCTION EDITCI/FR FREE NODE EDITCI/FR FIRST PAGE EDITCI/GE GET NODE EDITCI/IN FIND INDEX OF SUBSTRING EDITCI/IN INSERT LINE EDITCI/LA LAST PAGE EDITCI/MI MIDLINE BREAK FUNCTION EDITCI/NE NEW LINE EDITCI/NX NEXT LINE EDITCI/NX NEXT PAGE EDITCI/NX NEXT VALUE OF COMMAND LINE EDITCI/PF CONTINUE SEARCH FUNCTION EDITCI/PR PREVIOUS LINE EDITCI/PR PREVIOUS PAGE EDITCI/PU PUT DEFAULTS EDITCI/QU QUIT FUNCTION EDITCI/RE RETURN EDITCI/SE SELECT LINES FUNCTION EDITCI/SP SPLIT A LINE EDITCI/TM TEMPORARY COPY EDITCI/YA PASTE FUNCTION LOAD LOAD A FILE MARGIN SET MARGINS NAME THE BUFFER NAME REPEAT REPEAT FUNCTION/COMMAND REPLACE REPLACE COMMAND

SAVE FILE

TEXT EDITOR Where-include-file-used List

Include Module Module File Name Purpose

SEARCH SEARCH COMMAND

FPCODE

CLEAR BUFFER CLEAR EDIT CALLABLE INTERFACE EDITCI EDITCI/AD ADD NODE EDITCI/CM COMMAND LIST EDITCI/CM COMMAND MENU EDITCI/CO COMMAND FUNCTION EDITCI/CU CUT FUNCTION EDITCI/DE DELETE LINE EDITCI/DE DELETE NODE EDITCI/DO DO A COMMAND EDITCI/ED EDIT LOOP EDITCI/FI PASTE WITH FILL FUNCTION EDITCI/FR FREE NODE EDITCI/FR FIRST PAGE EDITCI/GE GET NODE EDITCI/IN FIND INDEX OF SUBSTRING EDITCI/IN INSERT LINE EDITCI/LA LAST PAGE EDITCI/MI MIDLINE BREAK FUNCTION EDITCI/NE NEW LINE EDITCI/NX NEXT LINE EDITCI/NX NEXT PAGE EDITCI/NX NEXT VALUE OF COMMAND LINE EDITCI/PF CONTINUE SEARCH FUNCTION EDITCI/PR PREVIOUS LINE EDITCI/PR PREVIOUS PAGE EDITCI/PU PUT DEFAULTS EDITCI/QU QUIT FUNCTION EDITCI/RE RETURN EDITCI/SE SELECT LINES FUNCTION EDITCI/SP SPLIT A LINE EDITCI/TM TEMPORARY COPY EDITCI/YA PASTE FUNCTION LOAD A FILE LOAD

TEXT EDITOR Where-include-file-used List

Include File	Module Name	Module Purpose
	MARGIN	SET MARGINS
	NAME	NAME THE BUFFER
	REPEAT	REPEAT FUNCTION/COMMAND
	REPLACE	REPLACE COMMAND
	SAVE	SAVE FILE
	SEARCH	SEARCH COMMAND

FPD

CLEAR	CLEAR BUFFER
	EDIT CALLABLE INTERFACE
EDITCI/AD	ADD NODE
EDITCI/CM	COMMAND LIST
EDITCI/CM	COMMAND MENU
EDITCI/CO	COMMAND FUNCTION
EDITCI/CU	CUT FUNCTION
EDITCI/DE	DELETE LINE
EDITCI/DE	DELETE NODE
EDITCI/DO	DO A COMMAND
EDITCI/ED	EDIT LOOP
EDITCI/FI	PASTE WITH FILL FUNCTION
EDITCI/FR	FREE NODE
EDITCI/FR	FIRST PAGE
EDITCI/GE	GET NODE
EDITCI/IN	FIND INDEX OF SUBSTRING
EDITCI/IN	INSERT LINE
EDITCI/LA	LAST PAGE
EDITCI/MI	MIDLINE BREAK FUNCTION
EDITCI/NE	NEW LINE
EDITCI/NX	NEXT LINE
EDITCI/NX	NEXT PAGE
EDITCI/NX	NEXT VALUE OF COMMAND LINE
	CONTINUE SEARCH FUNCTION
	PREVIOUS LINE
EDITCI/PR	PREVIOUS PAGE
	PUT DEFAULTS
•	QUIT FUNCTION
EDITCI/RE	RETURN

TEXT EDITOR Where-include-file-used List

Include File	Module Name	Module Purpose
	EDITCI/SE	SELECT LINES FUNCTION
	EDITCI/SP	SPLIT A LINE
	EDITCI/TM	TEMPORARY COPY
	EDITCI/YA	PASTE FUNCTION
	LOAD	LOAD A FILE
	MARGIN	SET MARGINS
	NAME	NAME THE BUFFER
	REPEAT	REPEAT FUNCTION/COMMAND
	REPLACE	REPLACE COMMAND
	SAVE	SAVE FILE
	SEARCH	SEARCH COMMAND

FPPARM

CLEAR	CLEAR BUFFER
EDITCI	EDIT CALLABLE INTERFACE
EDITCI/AD	ADD NODE
EDITCI/CM	COMMAND LIST
EDITCI/CM	COMMAND MENU
EDITCI/CO	COMMAND FUNCTION
EDITCI/CU	CUT FUNCTION
EDITCI/DE	DELETE LINE
EDITCI/DE	DELETE NODE
EDITCI/DO	DO A COMMAND
EDITCI/ED	EDIT LOOP
EDITCI/FI	PASTE WITH FILL FUNCTION
EDITCI/FR	FREE NODE
EDITCI/FR	FIRST PAGE
EDITCI/GE	GET NODE
EDITCI/IN	FIND INDEX OF SUBSTRING
EDITCI/IN	INSERT LINE
EDITCI/LA	LAST PAGE
EDITCI/MI	MIDLINE BREAK FUNCTION
EDITCI/NE	NEW LINE
EDITCI/NX	NEXT LINE
EDITCI/NX	NEXT PAGE
EDITCI/NX	NEXT VALUE OF COMMAND LINE
EDITCI/PF	CONTINUE SEARCH FUNCTION

TEXT EDITOR Where-include-file-used List

 Module Name	Module Purpose
EDITCI/PR	PREVIOUS LINE
EDITCI/PR	PREVIOUS PAGE
EDITCI/PU	PUT DEFAULTS
EDITCI/QU	QUIT FUNCTION
EDITCI/RE	RETURN
EDITCI/SE	SELECT LINES FUNCTION
EDITCI/SP	SPLIT A LINE
EDITCI/TM	TEMPORARY COPY
EDITCI/YA	PASTE FUNCTION
LOAD	LOAD A FILE
MARGIN	SET MARGINS
NAME	NAME THE BUFFER

REPEAT FUNCTION/COMMAND REPLACE COMMAND

SAVE FILE SAVE

SEARCH SEARCH COMMAND

NTM

TE/MAIN MAIN MODULE FOR TEXT EDITOR

STDIO

CLEAR CLEAR BUFFER EDITCI EDIT CALLABLE INTERFACE EDITCI/AD ADD NODE EDITCI/CM COMMAND LIST EDITCI/CM COMMAND MENU EDITCI/CO COMMAND FUNCTION EDITCI/CU CUT FUNCTION EDITCI/DE DELETE LINE EDITCI/DE DELETE NODE EDITCI/DO DO A COMMAND EDITCI/ED EDIT LOOP EDITCI/FI PASTE WITH FILL FUNCTION EDITCI/FR FREE NODE

TEXT EDITOR Where-include-file-used List

Include	Module	Module
File	Name	Purpose
	ድክ፣ሞሮ፣ / ድክ	FIRST PAGE
	EDITCI/FR EDITCI/GE	
		FIND INDEX OF SUBSTRING
		INSERT LINE
		LAST PAGE
	-	MIDLINE BREAK FUNCTION
	EDITCI/NE	
	EDITCI/NX	
	EDITCI/NX	
		NEXT VALUE OF COMMAND LINE
		CONTINUE SEARCH FUNCTION
		PREVIOUS LINE
		PREVIOUS PAGE
		PUT DEFAULTS
	EDITCI/QU	QUIT FUNCTION
	EDITCI/RE	RETURN
	EDITCI/SE	SELECT LINES FUNCTION
	EDITCI/SP	SPLIT A LINE
	EDITCI/TM	TEMPORARY COPY
	EDITCI/YA	PASTE FUNCTION
	LOAD	LOAD A FILE
	MARGIN	SET MARGINS
	NAME	NAME THE BUFFER
		REPEAT FUNCTION/COMMAND
	REPLACE	REPLACE COMMAND
		SAVE FILE
		SEARCH COMMAND
	~	~

STDTYP

CLEAR CLEAR BUFFER
EDITCI EDIT CALLABLE INTERFACE
EDITCI/AD ADD NODE
EDITCI/CM COMMAND LIST
EDITCI/CM COMMAND MENU
EDITCI/CO COMMAND FUNCTION
EDITCI/CU CUT FUNCTION
EDITCI/DE DELETE LINE

TEXT EDITOR Where-include-file-used List

	Module	
File		Purpose
	EDITCI/DE	DELETE NODE
		DO A COMMAND
		EDIT LOOP
		PASTE WITH FILL FUNCTION
		FREE NODE
	EDITCI/FR	FIRST PAGE
	EDITCI/GE	GET NODE
	EDITCI/IN	FIND INDEX OF SUBSTRING
	EDITCI/IN	INSERT LINE
	EDITCI/LA	LAST PAGE
	EDITCI/MI	MIDLINE BREAK FUNCTION
	EDITCI/NE	NEW LINE
	EDITCI/NX	NEXT LINE
	EDITCI/NX	NEXT PAGE
	EDITCI/NX	NEXT VALUE OF COMMAND LINE
	EDITCI/PF	CONTINUE SEARCH FUNCTION
	EDITCI/PR	PREVIOUS LINE
	EDITCI/PR	PREVIOUS PAGE
	EDITCI/PU	PUT DEFAULTS
		QUIT FUNCTION
	EDITCI/RE	
	EDITCI/SE	SELECT LINES FUNCTION
	EDITCI/SP	SPLIT A LINE
		TEMPORARY COPY
		PASTE FUNCTION
	LOAD	LOAD A FILE
		SET MARGINS
		NAME THE BUFFER
	REPEAT	REPEAT FUNCTION/COMMAND
	REPLACE	REPLACE COMMAND
		SAVE FILE
		SEARCH COMMAND
	TE/MAIN	MAIN MODULE FOR TEXT EDITOR

3.10.6 Where External Routine Used List

The following lists each external function or routine listed in 3.10.3 and all the documented modules which call it. The purpose of each module is listed as well.

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

ABORT

EDITCI/DELDELETE LINE EDITCI/INLINSERT LINE

ADDFRM

EDITCI EDIT CALLABLE INTERFACE EDITCI/CMDCOMMAND LIST

EDITCI/CHDCOHHAND HENU

IOTA

MARGIN SET MARGINS

REPEAT FUNCTION/COMMAND

ESCPY

EDITCI EDIT CALLABLE INTERFACE

FCLOSE

LOAD LOAD A FILE SAVE SAVE FILE

FGETS

LOAD LOAD A FILE

FOPEN

LOAD LOAD A FILE SAVE SAVE FILE

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

FWRITE

SAVE SAVE FILE

GDATA

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU EDITCI/COMCOMMAND FUNCTION EDITCI/EDIEDIT LOOP

GETCUR

EDITCI/CMDCOMMAND LIST EDITCI/EDIEDIT LOOP

GETMORE

EDITCI EDIT CALLABLE INTERFACE

GPAGE

EDITCI/CMDCOMMAND LIST

GAINDO

EDITCI/CMDCOMMAND LIST

INITAL

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

INITFP

TE/MAIN MAIN MODULE FOR TEXT EDITOR

ISPRINT

EDITCI/EDIEDIT LOOP

MALLOC

EDITCI/GETGET NODE

MEMCMP

EDITCI/CMDCOMMAND LIST EDITCI/COMCOMMAND FUNCTION

EDITCI/EDIEDIT LOOP

TE/MAIN MAIN MODULE FOR TEXT EDITOR

MEMCPY

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU EDITCI/EDIEDIT LOOP EDITCI/INLINSERT LINE

NAME NAME THE BUFFER REPLACE COMMAND

SAVE SAVE FILE

SEARCH SEARCH COMMAND

MEMSET

EDITCI EDIT CALLABLE INTERFACE

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

> EDITCI/CMDCOMMAND MENU EDITCI/EDIEDIT LOOP

EDITCI/FILPASTE WITH FILL FUNCTION

EDITCI/PUTPUT DEFAULTS

EDITCI/SELSELECT LINES FUNCTION

LOAD LOAD A FILE

OISCR

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU

EDITCI/COMCOMMAND FUNCTION

EDITCI/EDIEDIT LOOP EDITCI/QUIQUIT FUNCTION

PDATA

EDITCI/CMDCOMMAND MENU EDITCI/EDIEDIT LOOP EDITCI/PUTPUT DEFAULTS

PMSGLC

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU EDITCI/COMCOMMAND FUNCTION

PMSGLS

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU EDITCI/COMCOMMAND FUNCTION EDITCI/CUTCUT FUNCTION EDITCI/DOCDO A COMMAND EDITCI/EDIEDIT LOOP

EDITCI/FILPASTE WITH FILL FUNCTION

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

EDITCI/FRSFIRST PAGE
EDITCI/INLINSERT LINE
EDITCI/LASLAST PAGE
EDITCI/NXTNEXT LINE
EDITCI/NXTNEXT PAGE
EDITCI/PRVPREVIOUS LINE
EDITCI/PRVPREVIOUS PAGE
EDITCI/QUIQUIT FUNCTION
REPEAT REPEAT FUNCTION/COMMAND

PRINTF

EDITCI/DELDELETE LINE EDITCI/EDIEDIT LOOP EDITCI/INLINSERT LINE

TE/MAIN MAIN MODULE FOR TEXT EDITOR

PUTATT

EDITCI/COMCOMMAND FUNCTION

PUTCUR

EDITCI/COMCOMMAND FUNCTION

REPEAT REPEAT FUNCTION/COMMAND

PUTLOC

EDITCI/EDIEDIT LOOP

RMVPAG

EDITCI/CMDCOMMAND LIST EDITCI/CMDCOMMAND MENU

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

STRCAT

EDITCI/PUTPUT DEFAULTS
REPLACE REPLACE COMMAND

STRCPY

EDITCI EDIT CALLABLE INTERFACE

EDITCI/CHDCOMMAND LIST EDITCI/CHDCOMMAND MENU

EDITCI/PFSCONTINUE SEARCH FUNCTION

EDITCI/PUTPUT DEFAULTS

EDITCI/SELSELECT LINES FUNCTION

STRLEN

EDITCI EDIT CALLABLE INTERFACE

EDITCI/DOCDO A COMMAND EDITCI/PUTPUT DEFAULTS

EDITCI/SELSELECT LINES FUNCTION

REPLACE REPLACE COMMAND SEARCH COMMAND

STRNCAT

REPLACE REPLACE COMMAND

STRNCMP

EDITCI EDIT CALLABLE INTERFACE

EDITCI/CHDCOMMAND LIST EDITCI/CHDCOMMAND MENU EDITCI/COMCOMMAND FUNCTION EDITCI/DOCDO A COMMAND

TEXT EDITOR Where-external-routine-used List

System Module Module Module Name Purpose

EDITCI/EDIEDIT LOOP

REPEAT FUNCTION/COMMAND

STRUPC

EDITCI/DOCDO A COMMAND

TERMFP

TE/MAIN MAIN MODULE FOR TEXT EDITOR

TOUPPER

CLEAR CLEAR BUFFER

EDITCI/INDFIND INDEX OF SUBSTRING

TRMNAT

TE/MAIN MAIN MODULE FOR TEXT EDITOR

3.10.7 Main Program Parts List

The following lists each Main Program listed in 3.10.1 and all the modules which are called either by that module itself or by any of the documented modules which it calls. It is possible for a non-main module to be listed more that once if it is called by multiple modules. The called modules, in this case known as program parts, are marked as to whether they are documented here. If so, the phrase "well-defined module" appears by the module name, if not it is an "external "routine". The Purpose of the Main Program module is listed as well.

TEXT EDITOR Main Program Parts List

Main Pgm	Module	Module
Name	Name	Type

TE/MAIN

Purpose--- MAIN MODULE FOR TEXT EDITOR

ABORT External routine ADDFRM External routine ATOI External routine **CLEAR** Well-defined module Well-defined module EDITCI Well-defined module EDITCI/ADDNODE EDITCI/CMDLIST Well-defined module Well-defined module EDITCI/CMDMENU EDITCI/COMMAND Well-defined module EDITCI/CUT Well-defined module EDITCI/DELLINE Well-defined module EDITCI/DELNODE Well-defined module Well-defined module EDITCI/DOCMD EDITCI/EDIT Well-defined module EDITCI/FILL Well-defined module EDITCI/FREENODE Well-defined module EDITCI/FRSTPAGE Well-defined module EDITCI/GETNODE Well-defined module EDITCI/INDEX Well-defined module EDITCI/INLINE Well-defined module EDITCI/LASTPAGE Well-defined module Well-defined module EDITCI/MIDLINE EDITCI/NEWLINE Well-defined module EDITCI/NXTLINE Well-defined module Well-defined module EDITCI/NXTPAGE EDITCI/NXTVAL Well-defined module EDITCI/PFSRCH Well-defined module EDITCI/PRVLINE Well-defined module EDITCI/PRVPAGE Well-defined module EDITCI/PUTDEF Well-defined module Well-defined module EDITCI/QUIT EDITCI/RETRN Well-defined module Well-defined module EDITCI/SELECT EDITCI/SPLIT Well-defined module EDITCI/TMPCPY Well-defined module EDITCI/YANK Well-defined module ESCPY External routine **FCLOSE** External routine **FGETS** External routine

TEXT EDITOR Main Program Parts List

Main Pgm Name	Module Name	Module Type
	FOPEN	External routine
	FWRITE	External routine
	GDATA	External routine
	GETCUR	External routine
	GETMORE	External routine
	GPAGE	External routine
	GWINDO	External routine
	INITAL	External routine
	INITFP	External routine
	ISPRINT	External routine
	LOAD	Well-defined module
	MALLOC	External routine
	MARGIN	Well-defined module
	MEMCMP	External routine
	MEMCPY	External routine
	MEMSET	External routine
	NAME	Well-defined module
	OISCR	External routine
	PDATA	External routine
	PMSGLC	External routine
	PMSGLS	External routine
	PRINTF	External routine
	PUTATT	External routine
	PUTCUR	External routine
	PUTLOC	External routine
	REPEAT	Well-defined module
	REPLACE	Well-defined module
	RMVPAG	External routine
	SAVE	Well-defined module
	SEARCH	Well-defined module
	STRCAT	External routine
	STRCPY	External routine
	STRLEN	External routine
	STRNCAT	External routine
	STRNCMP	External routine
	STRUPC	External routine
	TERMFP	External routine
	TOUPPER	External routine
	TRMNAT	External routine

3.10.8 Module Documentation

C

The following documentation describes information which is specific to each individual module being documented in this specification as listed in section 3.10.2. It provides a compact way of getting information that would be otherwise buried within each module's source code.

The specific items in this module documentation have the following meanings:

NAME: Name of program Module.

PURPOSE: Purpose of Module as detailed in the

source code.

LANGUAGE: Programming language source code is

written in.

The choices are:

VAX-11 FORTRAN

(I/S-1 Workbench 'C')

VAX-11 COBOL

MODULE TYPE: Whether a Program, Subroutine, or

Function.

SOURCE FILE: Name of Source File from file

specification.

SOURCE FILE TYPE: Source File Extension from file

specification.

HOST: Whether this is a host-dependent

routine (VAX or IBM) or blank if

host-independent.

SUBSYSTEM: IISS sub-system this file resides in.

SUBDIRECTORY: Sub-directory of that subsystem in

which this file resides.

DOCUMENTATION GROUP: Name of documentation group of which

this source file is a member.

DESCRIPTION: A description of the module as otained

from the source code.

ARGUMENTS: The arguments with which this routine

is called if it is a Subroutine or a

Function.

INCLUDE FILES: A list of all the files that are

included into this module as well as

their purposes.

ROUTINES CALLED: Subroutines or Functions, either

documented or external, called by

this module, if any.

CALLED DIRECTLY BY: The documented routines which call

this module, if any.

USED IN MAIN PROGRAM(S): The documented Main Programs which

contain this module in their parts list according to the list in section

3.10.7.

Section 1 (Section)

The Module Documentation is arranged alphabetically according to Module Name.

NAME:

CLEAR

PURPOSE:

CLEAR BUFFER

LANGUAGE:

C

MODULE TYPE: FUNCTION TYPE: FUNCTION CHAR * ()

SOURCE FILE:

SDIMAL

SOURCE FILE TYPE:

EDITCI

HOST:

. C

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *CLEAR()

DESCRIPTION - CLEAR

IMPLEMENTS THE CLEAR BUFFER COMMAND.

THE CONTENTS OF THE BUFFER SEL ARE REMOVED AND FREED AND THE CONTENTS

OF THE BUFFER BUF ARE MOVED TO THE SEL BUFFER. THE POINTERS BUF START

AND CUR ROW ARE MAINTAINED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/ADDNODE - ADD NODE

EDITCI/DELLINE - DELETE LINE

EDITCI/FREENODE - FREE NODE

EDITCI/DELNODE - DELETE NODE

TOUPPER

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME:

EDITCI

PURPOSE:

EDIT CALLABLE INTERFACE

LANGUAGE:

 \mathbf{C}

MODULE TYPE: FUNCTION TYPE: FUNCTION BOOL ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

.C

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: ------

SYNOPSIS

BOOL EDITCI(FILE, CHANGED)

CHAR FILE[]:

INT *CHANGED:

INPUTS:

FILE - CHARACTER STRING WITH NAME OF FILE TO BE EDITED.

LENGTH

IS 30. STRING MUST BE BLANK FILLED IN ALL

LANGUAGES EXCEPT C.

OUTPUTS:

CHANGED - POINTER TO FLAG INDICATING THAT THE FILE WAS CHANGED.

DESCRIPTION

THIS STARTS UP THE EDITOR. IT IS THE ENTRY POINT IF CALLED FROM A

PROGRAM. RETURNS TRUE IF THE FILE HAS BEEN CHANGED ELSE FALSE.

INITIALIZES THE THREE BUFFERS, PUTS UP THE EDITING FORM. IF SPECIFIED

IT READS IN A FILE AND STARTS THE EDITING LOOP.

DESCRIPTION

FORMS PROCESSOR TEXT EDITOR. PROVIDES TEXT EDITING CAPABILITY FOR

IISS ENVIRONMENT.

THE TE'S MODULE HIERARCHY IS RATHER FLAT. IN GENERAL THERE IS ONE

MODULE WHICH IMPLEMENTS EACH FUNCTION OR COMMAND. THESE MODULES ARE

JUST BELOW THE INITIALIZATION AND EDIT LOOP. UNDER THESE ARE A SMALL

NUMBER OF ROUTINES WHICH PERFORM POINTER MAINTENANCE AND OTHER HOUSE

KEEPING FUNCTIONS.

PRIMARY DATA STRUCTURE CONSISTS OF THREE BUFFERS. THESE BUFFERS ARE

DOUBLY LINKED LISTS WITH A HEADER AND TRAILER NODE. THESE TWO NODES

ARE POINTED TO BY X TOF AND X BOF RESPECTIVELY, WHERE X IS THE NAME

OF THE BUFFER. THE NODE STRUCTURE IS DENOTED BY THE STRUCT "TEXT_LINE". THE MAIN BUFFER CONTAINING THE FILE BEING EDITED HAS

SEVERAL OTHER POINTERS WHICH INDICATE THE FIRST LIME TO BE DISPLAYED.

THE LINE CONTAINING THE CURSOR AND A LINE WHICH IS A TERMINUS OF THE

SELECT RANGE.

BUF - BUFFER WHICH CONTAINS THE CONTENTS OF THE FILE BEING EDITED.

BUF TOF - A POINTER TO THE BUF'S HEADER NODE.

BUF BOF - A POINTER TO THE BUF'S TRAILER NODE.

CUR ROW - A POINTER TO THE LINE CONTAINING THE CURSOR.

BUF_START - A POINTER TO THE FIRST LINE OF BUF TO DISPLAY.

INSEL - A POINTER TO THE LINE WHICH IS A TEPMINUS OF THE SELECT

RANGE. IT IS NULL IF NO SELECT RANGE IS ACTIVE.

SEL - BUFFER WHICH CONTAINS THE CONTENTS OF THE PASTE BUFFER.

SEL TOF - A POINTER TO THE SEL'S HEADER NODE.

SEL BOF - A POINTER TO THE SEL'S TRAILER NODE.

TMP - BUFFER FOR TEMPORARY HOLDING. LINES ARE INSERTED HERE FIRST

THEN WHEN AN OPERATION IS SUCCESSFULLY COMPLETED THEY ARE MOVED

TO BUFFER BUF.

TMP_TOF - A POINTER TO THE TMP'S HEADER NODE.
TMP_BOF - A POINTER TO THE TMP'S TRAILER NODE.

LINE NODES ARE ALLOCATED FROM A FREE POOL AND EXCEPT FOR INITIALIZATION

ALL NEXT AND PREVIOUS POINTER MAINTENANCE IS PERFORMED BY ONE OF FOUR

PROCEDURES.

GETNODE - ALLOCATES A NODE FROM THE FREE LIST.

FREENODE - RETURNS A NODE TO THE FREE LIST.

ADDNODE - A GIVEN NODE IS LINKED INTO A BUFFER.

DELNODE - REMOVES A GIVEN NODE FROM A BUFFER.

TWO HIGHER LEVEL PROCEDURES ARE USED TO INSERT STRINGS AND DELETE NODES

AND MAINTAIN THE POINTERS BUF_START AND CUR_ROW.

INLINE - INSERTS THE GIVEN STRING INTO THE GIVEN BUFFER. MAINTAINS

THE POINTERS BUF START AND CUR ROW.

DELLINE - REMOVES THE GIVEN NODE BUT DOES NOT FREE IT.
MAINTAINS

THE POINTERS BUF_START AND CUR_ROW.

THE POSITION THE CURSOR IS SUPPOSED TO BE AT IS KEPT IN SCRN ROW AND

SCRN_COL. ALONG WITH BUF_START AND CUR_ROW THEY DETERMINE WHICH

PORTION OF THE BUF IS TO BE DISPLAYED AND THE CURSOR'S POSITION.

NEARLY ALL MODULES MANIPULATE THEIR VALUES.

ARGUMENTS:

FILE = CHAR []
CHANGED = INT *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

GETMORE
MEMSET
ADDFRM
STRNCMP
ESCPY
STRCPY
EDITCI/DOCMD - DO A COMMAND
EDITCI/FRSTPAGE - FIRST PAGE
EDITCI/EDIT - EDIT LOOP
EDITCI/DELNODE - DELETE NODE
EDITCI/FREENODE - FREE NODE
STRLEN

CALLED DIRECTLY BY:

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

USED IN MAIN PROGRAM(S):

NAME: EDITCI/ADDNODE

PURPOSE: ADD NODE

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID () SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID ADDNODE(P, Q)
TEXT LINE *P, *Q;

DESCRIPTION - ADDNODE

INSERTS THE NODE POINTED TO BY P INTO THE LIST BEFORE THE NODE POINTED

TO BY Q.

ARGUMENTS:

P = TEXT_LINE *
Q = TEXT_LINE *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

CALLED DIRECTLY BY:

EDITCI/CUT - CUT FUNCTION EDITCI/TMPCPY - TEMPORARY COPY

CLEAR - CLEAR BUFFER EDITCI/INLINE - INSERT LINE

USED IN MAIN PROGRAM(S):

NAME: PURPOSE: EDITCI/CMDLIST COMMAND LIST

LANGUAGE:

C

MODULE TYPE: FUNCTION TYPE: FUNCTION INT ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC INT CMDLIST()

DESCRIPTION - CMDLIST

IMPLEMENTS THE COMMAND LIST.

IT PERFORMS THE FOLLOWING:

- 1. DISPLAYS THE COMMAND LIST
- 2. GETS AND PARSES THE INPUT FROM THE COMMAND LIST.
- 3. GOES TO THE COMMAND'S FORM IF REQUIRED. ELSE DOES THE COMMAND.
- 4. RETURNS THE FUNCTION KEY PRESSED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

GWINDO STRNCMP PMSGLC RMVPAG

EDITCI/NXTVAL - NEXT VALUE OF COMMAND LINE
MEMCPY
STRCPY
EDITCI/DOCMD - DO A COMMAND
GETCUR
EDITCI/INDEX - FIND INDEX OF SUBSTRING
PMSGLS
EDITCI/CHDMENU - COMMAND MENU
GDATA
OISCR
MEMCMP
ADDFRM
GPAGE

CALLED DIRECTLY BY:

REPEAT - REPEAT FUNCTION/COMMAND EDITCI/COMMAND - COMMAND FUNCTION

USED IN MAIN PROGRAM(S):

NAME: PURPOSE: EDITCI/CMDMENU

COMMAND MENU

LANGUAGE:

MODULE TYPE:

FUNCTION

FUNCTION TYPE:

INT ()

SOURCE FILE: SOURCE FILE TYPE: .C

EDITCI

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC INT CMDMENU(MENUNUM) INT MENUNUM;

DESCRIPTION - CMDMENU

IMPLEMENTS THE COMMAND FORM.

IT PERFORMS THE FOLLOWING:

1. DISPLAYS THE FORM WITH DEFAULTS FOR THE COMMAND REQUESTED FROM THE

COMMAND LIST (MENUNUM).

- 2. GETS AND PARSES THE INPUT FROM THE COMMAND FORM.
- 3. DOES THE COMMAND.
- 4. RETURNS THE FUNCTION KEY PRESSED.

ARGUMENTS:

MENUNUM = INT

INCLUDE FILES: _____

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER **** STDIO

- FORM PROCESSOR DATA FPD

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

ADDFRM
STRNCHP
PMSGLC
RMVPAG
EDITCI/NXTVAL - NEXT VALUE OF COMMAND LINE
MEMCPY
STRCPY
EDITCI/DOCMD - DO A COMMAND
PMSGLS
MEMSET
GDATA
EDITCI/PUTDEF - PUT DEFAULTS
PDATA
OISCR

CALLED DIRECTLY BY:

EDITCI/CMDLIST - COMMAND LIST

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/COMMAND

PURPOSE:

COMMAND FUNCTION

LANGUAGE:

MODULE TYPE: FUNCTION TYPE: FUNCTION

INT ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC INT COMMAND()

DESCRIPTION - COMMAND

IMPLEMENTS THE COMMAND FUNCTION AND COMMAND LINE COMMAND. IT PERFORMS THE FOLLOWING:

- 1. GUARDS THE EDIT AREA.
- 2. GETS AND PARSES THE INPUT FROM THE COMMAND LINE.
- 3. GOES TO THE COMMAND LINE IF REQUIRED.

ELSE DOES THE COMMAND.

4. RETURNS THE FUNCTION KEY PRESSED.

INCLUDE FILES:

- STANDARD TYPE DEFINITIONS STDTYP

- **** PURPOSE NOT FOUND BY STRIPPER **** STDIO

- FORM PROCESSOR DATA

- **** PURPOSE NOT FOUND BY STRIPPER **** CTYPE

- FORM PROCESSOR RETURN CODES FPCODE - FORM PROCESSOR PARAMETERS FPPARM

ROUTINES CALLED:

PUTATT

STRNCHP

PMSGLC

MEMCMP

EDITCI/CMDLIST - COMMAND LIST
EDITCI/NXTVAL - NEXT VALUE OF COMMAND LINE
EDITCI/DOCMD - DO A COMMAND
PMSGLS
GDATA
OISCR
PUTCUR

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME: PURPOSE: EDITCI/CUT

CUT FUNCTION

LANGUAGE:

MODULE TYPE: FUNCTION TYPE: SUBROUTINE

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

.C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID CUT(DELCUT)

BOOL DELCUT;

DESCRIPTION - CUT

IMPLEMENTS THE DELETE LINE AND DELETE SELECT RANGE FUNCTION. REMOVES THE INDICATED NODE(S) AND PLACES IT(THEM) IN THE SEL BUFFER.

IF THE SELECT MODE IS ON THE SEL BUFFER IS CLEARED AND ALL LINES IN

THE SELECT RANGE ARE PUT IN THE SEL BUFFER.

ELSE THE LINE WITH THE CURSOR IS PLACED IN THE SEL BUFFER.

THE POINTERS BUF START AND CUR ROW ARE MAINTAINED TO MINIMIZE THE

VISUAL DISTURBANCE OF THE SCREEN.

ARGUMENTS: _____

DELCUT =

BOOL

INCLUDE FILES:

- STANDARD TYPE DEFINITIONS STDTYP

- **** PURPOSE NOT FOUND BY STRIPPER **** STDIO

- FORM PROCESSOR DATA FPD

- **** PURPOSE NOT FOUND BY STRIPPER **** CTYPE

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/SELECT - SELECT LINES FUNCTION
EDITCI/SPLIT - SPLIT A LINE
EDITCI/ADDNODE - ADD NODE
EDITCI/MIDLINE - MIDLINE BREAK FUNCTION
EDITCI/FREENODE - FREE NODE
EDITCI/DELLINE - DELETE LINE
PMSGLS

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/DELLINE

PURPOSE:

DELETE LINE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID DELLINE(P)

TEXT LINE *P;

DESCRIPTION - DELLINE

REMOVES THE NODE POINTED TO BY P FROM ITS BUFFER BUT DOES

NOT FREE IT.

THE POINTERS BUF START AND CUR_ROW ARE MAINTAINED.

ARGUMENTS:

TEXT LINE *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/DELNODE - DELETE NODE

ABORT

PRINTF

CALLED DIRECTLY BY:

EDITCI/CUT - CUT FUNCTION

EDITCI/SELECT - SELECT LINES FUNCTION

CLEAR - CLEAR BUFFER REPLACE - REPLACE COMMAND

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/DELNODE

PURPOSE:

DELETE NODE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID DELNODE(P)

TEXT LINE *P;

DESCRIPTION - DELNODE

REMOVES THE NODE POINTED TO BY P FROM ITS BUFFER BUT DOES NO FREE IT.

ARGUMENTS:

TEXT LINE *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

CALLED DIRECTLY BY:

EDITCI/DELLINE - DELETE LINE

EDITCI/TMPCPY - TEMPORARY COPY

CLEAR - CLEAR BUFFER

EDITCI

- EDIT CALLABLE INTERFACE

EDITCI/INLINE - INSERT LINE

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/DOCMD

PURPOSE:

DO A COMMAND

LANGUAGE:

MODULE TYPE:

FUNCTION

FUNCTION TYPE:

CHAR * ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

.C

HOST:

SUBDIRECTORY:

SUBSYSTEM:

UI TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC CHAR *DOCMD()

DESCRIPTION - DOCMD

CALLS THE PROCEDURE IMPLEMENTING THE COMMAND CONTAINED IN

DATA[0].

EACH PROCEDURE RETURNS A POINTER TO NULL IF SUCCESSFUL ELSE

POINTER IS TO A STRING WITH AN ERROR MESSAGE WHICH DOCMD ISSUES.

INCLUDE FILES:

STDTYP

- STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

NAME

- NAME THE BUFFER

REPEAT

- REPEAT FUNCTION/COMMAND

MARGIN

- SET MARGINS

REPLACE

- REPLACE COMMAND

CLEAR

- CLEAR BUFFER

SAVE

SEARCH

- SAVE FILE - SEARCH COMMAND

LOAD

- LOAD A FILE

PMSGLS STRLEN

STRNCMP

STRUPC

CALLED DIRECTLY BY:

EDITCI/PFSRCH - CONTINUE SEARCH FUNCTION

REPEAT - REPEAT FUNCTION/COMMAND

EDITCI

- EDIT CALLABLE INTERFACE

EDITCI/COMMAND - COMMAND FUNCTION

EDITCI/CMDLIST - COMMAND LIST

EDITCI/CHDMENU - COMMAND MENU

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/EDIT

PURPOSE:

EDIT LOOP

LANGUAGE:

C

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

.C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID EDIT()

DESCRIPTION - EDIT

PERFORMS THE EDIT LOOP:

- 1. PUT DATA TO SCREEN.
- 2. DO AN OISCR.
- 3. GET DATA FROM SCREEN.
- 4. CALL PRODURE IMPLEMENTING FUNCTION KEY PRESSED.
- 5. REPEAT.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PMSGLS

EDITCI/PFSRCH - CONTINUE SEARCH FUNCTION

EDITCI/MIDLINE - MIDLINE BREAK FUNCTION

EDITCI/CUT - CUT FUNCTION

EDITCI/SELECT - SELECT LINES FUNCTION

EDITCI/FILL - PASTE WITH FILL FUNCTION EDITCI/YANK - PASTE FUNCTION EDITCI/NEWLINE - NEW LINE EDITCI/COMMAND - COMMAND FUNCTION EDITCI/INDEX - FIND INDEX OF SUBSTRING EDITCI/LASTPAGE - LAST PAGE EDITCI/FRSTPAGE - FIRST PAGE EDITCI/PRVLINE - PREVIOUS LINE EDITCI/NXTLINE - NEXT LINE EDITCI/PRVPAGE - PREVIOUS PAGE EDITCI/NXTPAGE - NEXT PAGE EDITCI/QUIT - QUIT FUNCTION GETCUR **MEMCMP GDATA OISCR** PUTLOC STRNCMP PDATA PRINTF **ISPRINT** MEMSET MEMCPY

CALLED DIRECTLY BY:

EDITCI - EDIT CALLABLE INTERFACE

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME:

EDITCI/FILL

PURPOSE:

PASTE WITH FILL FUNCTION

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

.C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID FILL()

DESCRIPTION - FILL

IMPLEMENTS THE PASTE WITH FILL FUNCTION.

INSERTS A COPY OF THE SEL BUFFER JUST BEFORE THE CUR ROW

ACCORDING TO THE

CURRENT FILL MARGINS (FILMRGN.LEFT AND FILMRGN.RIGHT)

INCLUDE FILES: _____

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR RETURN CODES FPCODE - FORM PROCESSOR PARAMETERS FPPARM

ROUTINES CALLED:

EDITCI/TMPCPY - TEMPORARY COPY

PMSGLS

EDITCI/INLINE - INSERT LINE

MEMSET

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME:

EDITCI/FREENODE

PURPOSE:

FREE NODE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID FREENODE(P)

TEXT LINE *P;

DESCRIPTION - FREENODE

PUTS THE NODE POINTED TO BY P BACK ON THE FREE LIST.

ARGUMENTS:

TEXT_LINE *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

CALLED DIRECTLY BY:

EDITCI/CUT - CUT FUNCTION

EDITCI/SELECT - SELECT LINES FUNCTION

CLEAR - CLEAR BUFFER REPLACE - REPLACE COMMAND

EDITCI

- EDIT CALLABLE INTERFACE

EDITCI/INLINE - INSERT LINE

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/FRSTPAGE

PURPOSE:

FIRST PAGE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: _____

STATIC VOID FRSTPAGE()

DESCRIPTION - FRSTPAGE

IMPLEMENTS THE FIRST PAGE FUNCTION.

SETS BUF START SO THE FIRST DSP HT LINES OF BUF ARE

DISPLAYED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA FPD

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR TETURN CODES

ROUTINES CALLED:

PMSGLS

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPLACE - REPLACE COMMAND

- EDIT CALLABLE INTERFACE EDITCI

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/GETNODE

PURPOSE:

GET NODE

LANGUAGE:

MODULE TYPE:

FUNCTION

FUNCTION TYPE:

TEXT LINE * ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC TEXT LINE *GETNODE()

DESCRIPTION - GETNODE

GETS A TEXT LINE NODE FROM THE FREE LIST AND RETURNS A

POINTER TO IT.

NODES ARE ALLOCATED 100 AT A TIME. IF GETNODE FAILS IT RETURNS A NULL.

INCLUDE FILES: ______

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA FPD

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR

ROUTINES CALLED: _____

MALLOC

CALLED DIRECTLY BY:

EDITCI/INLINE - INSERT LINE

USED IN MAIN PROGRAM(S):

NAME: EDITCI/INDEX

PURPOSE: FIND INDEX OF SUBSTRING

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: INT ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

SYNOPSIS

INT INDEX(STR, SUB)
CHAR *STR, *SUB;

DESCRIPTION

INDEX RETURNS THE OFFSET OF THE SUBSTRING IN THE STRING OR -1 IF THE

STRING DOES NOT CONTAIN THE SUBSTRING. THE UPPER CASE REPRESENTATION

OF THE STRINGS ARE USED.

ARGUMENTS:

STR = CHAR * CHAR *

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

3-67

TOUPPER

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

SEARCH - SEARCH COMMAND REPLACE - REPLACE COMMAND EDITCI/CMDLIST - COMMAND LIST

EDITCI/PUTDEF - PUT DEFAULTS

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME:

EDITCI/INLINE

PURPOSE:

INSERT LINE

LANGUAGE:

MODULE TYPE: FUNCTION TYPE:

FUNCTION BOOL ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

.C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC BOOL INLINE(P. LINE)

TEXT LINE *P;

CHAR LINE[]:

DESCRIPTION - INLINE

GETS A NODE PUTS THE STRING POINTED TO BY LINE INTO IT AND

INSERTS IT

INTO THE LIST JUST BEFORE THE NODE POINTED TO BY P. THE POINTER

BUF START IS MAINTAINED.

IF INLINE IS UNABLE TO OBTAIN A NODE IT ISSUES A MESSAGE AND **CLEARS**

THE TMP BUFFER.

ARGUMENTS:

P =

TEXT LINE *

LINE =

CHAR []

INCLUDE FILES:

STDTYP

- STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PRINTF ABORT

EDITCI/GETNODE - GET NODE

PMSGLS

EDITCI/DELNODE - DELETE NODE

EDITCI/FREENODE - FREE NODE

MEMCPY

EDITCI/ADDNODE - ADD NODE

CALLED DIRECTLY BY:

EDITCI/NEWLINE - NEW LINE

EDITCI/YAN - PASTE FUNCTION

EDITCI/FIL - PASTE WITH FILL FUNCTION

EDITCI/SELECT - SELECT LINES FUNCTION

EDITCI/SPLIT - SPLIT A LINE

LOAD - LOAD A FILE

REPLACE - REPLACE COMMAND

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

and the control of th

NAME:

EDITCI/LASTPAGE

PURPOSE:

LAST PAGE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID LASTPAGE()

DESCRIPTION - LASTPAGE

IMPLEMENTS THE LAST PAGE FUNCTION.

SETS BUF START SO THE LAST DSP HT LINES OF BUF ARE DISPLAYED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PMSGLS

CALLED DIRECTLY BY: ______

EDITCI/EDI - EDIT LOOP

REPLACE - REPLACE COMMAND

USED IN MAIN PROGRAM(S):

NAME: EDITCI/MIDLINE

PURPOSE: MIDLINE BREAK FUNCTION

LANGUAGE:

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID () SOURCE FILE: ED: SOURCE FILE TYPE: .C EDITCI

HOST:

SUBSYSTEM: UI SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID MIDLINE()

DESCRIPTION - MIDLINE

IMPLEMENTS THE MIDLINE BREAK FUNCTION. SPLITS THE LINE POINTED TO BY CUR ROW AT SCRN COL AND SETS THE CURSOR TO

THE BEGINNING OF THE NEW LINE.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES - FORM PROCESSOR PARAMETERS FPPARM

ROUTINES CALLED: -----

EDITCI/RETRN - RETURN

EDITCI/SPLIT - SPLIT A LINE

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

EDITCI/CUT - CUT FUNCTION
EDITCI/SELECT - SELECT LINES FUNCTION
REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME: EDITCI/NEWLINE

PURPOSE: NEW LINE

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID ()

SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID NEWLINE()

DESCRIPTION - NEWLINE

IMPLEMENTS THE INSERT LINE FUNCTION.
INSERTS A BLANK LINE AT CUR_ROW.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/INLINE - INSERT LINE

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME: EDITCI/NXTLINE

PURPOSE: NEXT LINE

LANGUAGE:

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID ()

SOURCE FILE: EDITCI

SOURCE FILE TYPE: ..

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID NXTLINE()

DESCRIPTION - NXTLINE

IMPLEMENTS THE NEXT LINE FUNCTION.
ADVANCES BUF_START BY ONE LINE TO THE NEXT LINE IS DISPLAYED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PMSGLS

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/NXTPAGE

PURPOSE:

NEXT PAGE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

. C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID NXTPAGE()

DESCRIPTION - NXTPAGE

IMPLEMENTS THE NEXT PAGE FUNCTION.

ADVANCES BUF START SO THE NEXT DSP HT LINES OF THE BUFFER

ARE DISPLAYED.

INCLUDE FILES: -----

STDTYP - STANDARD TYPE DEFINITIONS

CICTE - **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA

FPD CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PMSGLS

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

TE/MAIN - MAIN MODULE FOR TEXT EDITOR

NAME:

EDITCI/NXTVAL

PURPOSE:

NEXT VALUE OF COMMAND LINE

LANGUAGE:

MODULE TYPE: FUNCTION TYPE:

FUNCTION INT ()

SOURCE FILE:

SOURCE FILE TYPE:

EDITCI

.C

HOST:

UI

SUBSYSTEM: SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: _____

STATIC INT NXTVAL(CMD LINE)

CHAR CMD LINE[];

DESCRIPTION - NXTVAL

PARSES THE CMD LINE ARGUMENT AND LEAVES EACH OPERAND IN A

DATA[I].

EACH OPERAND IS '\O' TERMINATED. PUTS THE NUMBER OF

ARGUMENTS FOUND

IN NUMDATA.

ARGUMENTS

CMD LINE -

CHAR []

INCLUDE FILES

STITTYP

STANDARI TYPE DEFINITION:

STITE

THE RESERVE OF THE PROPERTY OF STREET

FFI

字()程件 字界(米() 15.5%

(TYPE

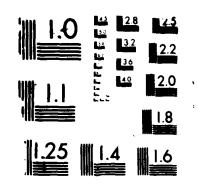
PPCO(#

多山頂鄉 (中間) 4 多 1 5 1 16 16 16 16 17 17 18 18 1 1 1 1 1

FPIARM

I SEM PROFILE

INTEGRATED INFORMATION SUPPORT SYSTEM (IISS) VOLUME BUSER INTERFACE SUBS (U) GENERAL ELECTRIC COSCHENECTADY MY PRODUCTION RESOURCES CONSUF GLANDORF ET AL 01 NOV 85 PS-620144600 F/G 12/5 AD-A182 656 2/3 UNCLASSIFIED NL



MICROCOPY RESOLUTION TEST CHART

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EDITCI/CHDLIST - COMMAND LIST EDITCI/CHDMENU - COMMAND MENU

USED IN MAIN PROGRAM(S):

TEXT EDITOR Module Documentation

NAME:

EDITCI/PFSRCH

PURPOSE:

CONTINUE SEARCH FUNCTION

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: _____

STATIC VOID PFSRCH()

DESCRIPTION - PFSRCH

IMPLEMENTS THE FIND NEXT OCCURRENCE OF THE STRING AS A FUNCTION.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER ****

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/DOCMD - DO A COMMAND

STRCPY

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME: PURPOSE: EDITCI/PRVLINE PREVIOUS LINE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

SOURCE FILE TYPE:

EDITCI

.C

HOST:

UI

SUBSYSTEM: SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: _____

STATIC VOID PRVLINE()

DESCRIPTION - PRVLINE

IMPLEMENTS THE PREVIOUS LINE FUNCTION. BACKS UP THE BUF START SO THE PREVIOUS LINE OF BUF IS DISPLAYED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER **** STDIO

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES - FORM PROCESSOR PARAMETERS FPPARM

ROUTINES CALLED: ______

PMSGLS

CALLED DIRECTLY BY: _____

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/PRVPAGE

PURPOSE:

PREVIOUS PAGE

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID PRVPAGE()

DESCRIPTION - PRVPAGE

IMPLEMENTS THE PREVIOUS PAGE FUNCTION.

BACKS UP BUF START SO THE PREVIOUS DSP_HT LINES OF THE

BUFFER ARE

DISPLAYED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

PMSGLS

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME: EDITCI/PUTDEF PURPOSE: PUT DEFAULTS

LANGUAGE:

FUNCTION MODULE TYPE: FUNCTION TYPE: INT () SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

UI SUBSYSTEM: SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC PUTDEF(FIELD, DATA) CHAR FIELD[], DATA[];

DESCRIPTION - PUTDEF

PUTS DEFAULT DATA IN THE FIELD.

ARGUMENTS:

CHAR [] FIELD = DATA = CHAR []

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO FPD - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/INDEX - FIND INDEX OF SUBSTRING

STRCPY STRLEN MEMSET

PDATA STRCAT

CALLED DIRECTLY BY:

EDITCI/CMDMENU - COMMAND MENU

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/QUIT

PURPOSE:

QUIT FUNCTION

LANGUAGE:

MODULE TYPE:

FUNCTION

FUNCTION TYPE:

BOOL ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

. C

HOST:

UI

SUBSYSTEM: SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION: -------

STATIC BOOL QUIT()

DESCRIPTION - QUIT

IMPLEMENTS THE QUIT KEY FUNCTION.

IF THE BUFFER HAS BEEN MODIFIED (SINCE THE INITIAL LOAD OR THE LAST SAVE)

YOU MUST PRESS THE QUIT KEY TWICE. PRESSING ANY OTHER KEY ABORTS THE QUIT

AND RETURNS TO EDIT.

IF THE BUFFER HAS NOT BEEN MODIFIED THE PROGRAM TERMINATES.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

-----**PMSGLS**

OISCR

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

USED IN MAIN PROGRAM(S):

NAME:

EDITCI/RETRN

PURPOSE:

RETURN

LANGUAGE:

MODULE TYPE:

SUBROUTINE

FUNCTION TYPE:

VOID ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

. C

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID RETRN()

DESCRIPTION - RETRN

SETS THE CURSOR TO THE BEGINNING OF THE NEXT LINE. THE POINTERS BUF START

AND CUR ROW ARE MAINTAINED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER ****
- FORM PROCESSOR DATA STDIO

FPD

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

CALLED DIRECTLY BY:

EDITCI/MIDLINE - MIDLINE BREAK FUNCTION

USED IN MAIN PROGRAM(S):

NAME: EDITCI/SELECT

PURPOSE: SELECT LINES FUNCTION

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID () SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID SELECT()

DESCRIPTION - SELECT

IMPLEMENTS THE MARK SELECT RANGE FUNCTION.

IF THE SELECT RANGE IS OFF, IT IS TURNED ON AND THE CUR_ROW IS MARKED

AS ONE TERMINUS OF THE SELECT RANGE. ELSE THE SELECT RANGE IS TURNED OFF.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/FREENODE - FREE NODE EDITCI/DELLINE - DELETE LINE EDITCI/INLINE - INSERT LINE

STRLEN STRCPY MEMSET

EDITCI/MIDLINE - MIDLINE BREAK FUNCTION

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP EDITCI/CUT - CUT FUNCTION

REPLACE - REPLACE COMMAND

USED IN MAIN PROGRAM(S):

NAME: EDITCI/SPLIT PURPOSE: SPLIT A LINE

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID ()

SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID SPLIT()

DESCRIPTION - SPLIT

SPLITS THE LINE POINTED TO BY CUR ROW AT SCRN COL.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/INLINE - INSERT LINE

CALLED DIRECTLY BY:

EDITCI/CUT - CUT FUNCTION

EDITCI/MIDLINE - MIDLINE BREAK FUNCTION

USED IN MAIN PROGRAM(S):

NAME: EDITCI/TMPCPY PURPOSE: TEMPORARY COPY

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID () SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID TMPCPY(MOVE_START)
BOOL MOVE START;

DESCRIPTION - TMPCPY

MOVES THE CONTENTS OF THE TMP BUFFER TO THE BUF BUFFER JUST BEFORE THE CUR ROW. THE POINTER BUF START IS MAINTAINED IF MOVE START

IS TRUE.

ARGUMENTS:

MOVE_START = BOOL

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/ADDNODE - ADD NODE EDITCI/DELNODE - DELETE NODE

CALLED DIRECTLY BY:

EDITCI/YAN - PASTE FUNCTION

EDITCI/FIL - PASTE WITH FILL FUNCTION

LOAD - LOAD A FILE REPLACE - REPLACE COMMAND

USED IN MAIN PROGRAM(S):

NAME: EDITCI/YANK PURPOSE: PASTE FUNCTION

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID () SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

STATIC VOID YANK()

DESCRIPTION - YANK

IMPLEMENTS THE PASTE FUNCTION.
INSERTS A COPY OF THE PASTE BUFFER BEFORE CUR ROW

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/TMPCPY - TEMPORARY COPY

EDITCI/INLINE - INSERT LINE

CALLED DIRECTLY BY:

EDITCI/EDI - EDIT LOOP

REPEAT - REPEAT FUNCTION/COMMAND

USED IN MAIN PROGRAM(S):

NAME: LOAD

PURPOSE: LOAD A FILE

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: CHAR * ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *LOAD()

DESCRIPTION - LOAD

IMPLEMENTS THE LOAD FILE COMMAND.

LOADS THE FILE NAMED BY DATA[1] AND INSERTS IT BEFORE

CUR ROW IN THE BUFFER

BUF.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

FCLOSE

EDITCI/TMPCPY - TEMPORARY COPY

EDITCI/INLINE - INSERT LINE

FGETS MEMSET FOPEN

CALLED DIRECTLY BY:

EDITCI/DOCHD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME: MARGIN

PURPOSE: SET MARGINS

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: CHAR * ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *MARGIN()

DESCRIPTION - MARGIN

IMPLEMENTS THE SET FILL MARGINS COMMAND.

SETS THE LEFT MARGIN TO DATA[1] AND THE RIGHT MARGIN TO DATA[2].

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES
FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

ATOI

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME: NAME

PURPOSE: NAME THE BUFFER

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: CHAR * ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *NAME()

DESCRIPTION - NAME

IMPLEMENTS THE GIVE THE BUFFER A DEFAULT SAVE NAME. SETS THE DEFAULT SAVE NAME TO DATA[1].

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

MEMCPY

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME: REPEAT

PURPOSE: REPEAT FUNCTION/COMMAND

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: CHAR * ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *REPEAT()

DESCRIPTION - REPEAT

IMPLEMENTS THE REPEAT COMMAND/FUNCTION COMMAND.

THE COMMAND OR FUNCTION WHICH FOLLOWS WILL BE PERFORMED THE NUMBER

OF TIMES GIVEN BY DATA[1].

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/PFSRCH - CONTINUE SEARCH FUNCTION
EDITCI/MIDLINE - MIDLINE BREAK FUNCTION
EDITCI/CUT - CUT FUNCTION
EDITCI/FILL - PASTE WITH FILL FUNCTION
EDITCI/YANK - PASTE FUNCTION
EDITCI/NEWLINE - NEW LINE
EDITCI/PRVLINE - PREVIOUS LINE

EDITCI/NXTLINE - NEXT LINE
EDITCI/PRVPAGE - PREVIOUS PAGE
EDITCI/NXTPAGE - NEXT PAGE
EDITCI/DOCHD - DO A COMMAND
EDITCI/COMMAND - COMMAND FUNCTION
EDITCI/CMDLIST - COMMAND LIST
STRNCHP
PUTCUR
PMSGLS
ATOI

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME: REPLACE

PURPOSE: REPLACE COMMAND

LANGUAGE: C

MODULE TYPE: FUNCTION FUNCTION TYPE: CHAR * ()
SOURCE FILE: EDITCI

SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *REPLACE()

DESCRIPTION - REPLACE

IMPLEMENTS THE REPLACE STRING COMMAND.

THE STRING DATA[1] IS REPLACED BY STRING DATA[2] ACCORDING TO THE OPTION

IN DATA[3] (OR THE SELECT RANGE IF ACTIVE). THESE BECOME THE DEFAULTS

FROM_STR, TO_STR, AND REPTYP RESPECTIVELY. IF DATA[1..3] ARE UNSPECIFIED

THE DEFAULTS ARE USED. THE POINTERS CUR_ROW AND BUF_START ARE MAINTAINED.

WARNING: IF REPLACE CANNOT INSERT A LINE THE REPLACEMENTS PERFORMED ARE

NOT BACKED OUT BUT THE CURSOR IS LEFT AT THE LINE WHERE THE FAILURE

OCCURED. NO LINE IS LEFT PARTIALLY REPLACED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO - **** PURPOSE NOT FOUND BY STRIPPER ****

FPD - FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARH - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/SELECT - SELECT LINES FUNCTION
EDITCI/LASTPAGE - LAST PAGE
EDITCI/FRSTPAGE - FIRST PAGE
EDITCI/FREENODE - FREE NODE
EDITCI/DELLINE - DELETE LINE
EDITCI/TMPCPY - TEMPORARY COPY
EDITCI/INLINE - INSERT LINE
STRCAT
STRUCAT
STRLEN
EDITCI/INDEX - FIND INDEX OF SUBSTRING
MEMCPY

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME:

SAVE

PURPOSE:

SAVE FILE

LANGUAGE:

MODULE TYPE:

FUNCTION

FUNCTION TYPE:

CHAR * ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

HOST:

SUBSYSTEM:

UI

SUBDIRECTORY:

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *SAVE()

DESCRIPTION - SAVE

IMPLEMENTS THE WRITE BUFFER TO A FILE COMMAND. WRITES THE BUFFER BUF TO THE FILE NAMED BY DATA[1]. IF NO NAME IS

SPECIFIED THE NAME IN WORK NAME IS USED.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS

STDIO

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPD

- FORM PROCESSOR DATA

CTYPE

- **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE

- FORM PROCESSOR RETURN CODES

FPPARM

- FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

FCLOSE

FWRITE

MEMCPY FOPEN

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME:

SEARCH

PURPOSE:

SEARCH COMMAND

LANGUAGE:

MODULE TYPE: FUNCTION TYPE: FUNCTION CHAR * ()

SOURCE FILE:

EDITCI

SOURCE FILE TYPE:

. C

HOST:

SUBSYSTEM: SUBDIRECTORY: UI TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

CHAR *SEARCH()

DESCRIPTION - SEARCH

IMPLEMENTS THE SEARCH BUFFER FOR A STRING.

THE BUFFER BUF IS SEARCHED FOR THE STRING CONTAINED IN DATA[1] IN THE

DIRECTION SPECIFIED IN DATA[2]. THESE BECOME THE DEFAULT SEARCH VALUES

SRCH LINE AND SRCHDIR RESPECTIVELY. THE SEARCH IS STARTED FROM CUR ROW

AND SCRN COL. IF DATA[1] AND DATA[2] ARE UNSPECIFIED THEN SRCH LINE AND

SRCHDIR ARE USED RESPECTIVELY. THE POINTERS BUF START AND CUR ROW ARE

MAINTAINED.

INCLUDE FILES:

のないというとは、「これできないとは、「これできないないとは、「これできないとなる。」 これできないというというといる。

STDTYP - STANDARD TYPE DEFINITIONS

- **** PURPOSE NOT FOUND BY STRIPPER **** STDIO

- FORM PROCESSOR DATA

CTYPE - **** PURPOSE NOT FOUND BY STRIPPER ****

FPCODE - FORM PROCESSOR RETURN CODES FPPARM - FORM PROCESSOR PARAMETERS

ROUTINES CALLED:

EDITCI/INDEX - FIND INDEX OF SUBSTRING STRLEN MEMCPY

CALLED DIRECTLY BY:

EDITCI/DOCMD - DO A COMMAND

USED IN MAIN PROGRAM(S):

NAME: TE/MAIN

PURPOSE: MAIN MODULE FOR TEXT EDITOR

LANGUAGE: C

MODULE TYPE: SUBROUTINE FUNCTION TYPE: VOID ()

SOURCE FILE: TE SOURCE FILE TYPE: .C

HOST:

SUBSYSTEM: UI SUBDIRECTORY: TE

DOCUMENTATION GROUP: TEXTEDT

DESCRIPTION:

SYNOPSIS

VOID MAIN(ARGC, ARGV)

INT ARGC; CHAR *ARGV[];

INPUTS:

ARGC - ARGUMENT COUNT ARCV - ARGUMENT VECTOR

DESCRIPTION - MAIN

CALLS EDITCI WITH A FILE NAME, IF SPECIFIED ELSE CALLS IT WITH NULL

STRING.

INCLUDE FILES:

STDTYP - STANDARD TYPE DEFINITIONS
NTM - NTM INTERFACE INCLUDE FILE

ROUTINES CALLED:

INITAL

MEMCMP

PRINTF

INITFP

EDITCI TERMFP TRMNAT

EDITCI - EDIT CALLABLE INTERFACE

3.10.9 Include File Descriptions

The following list contains a purpose and description of each include file listed in 3.10.4 as specified in the source code. The language it is written in is also given.

TEXT EDITOR Include File Description

FILE NAME: FPCODE

PURPOSE: FORM PROCESSOR RETURN CODES

LANGUAGE: C

 ${\tt DESCRIPTION}:$

KANASAS KASASAS SASASAS

TEXT EDITOR Include File Description

FILE NAME: FPD

PURPOSE: FORM PROCESSOR DATA

LANGUAGE: C

DESCRIPTION:

DESCRIPTION

DATA DEFINITIONS FOR ALL FORM PROCESSOR (INCLUDING MONITER)DATA.

TEXT EDITOR Include File Description

FILE NAME: FPPARM

PURPOSE: FORM PROCESSOR PARAMETERS

LANGUAGE: C

DESCRIPTION:

DESCRIPTION: THESE DATA DEFINITIONS ARE USED

IN THE FORM PROCESSOR ROUTINES.

TEXT EDITOR Include File Description

FILE NAME: NTM

PURPOSE: NTM INTERFACE INCLUDE FILE

LANGUAGE: C

DESCRIPTION:

DESCRIPTION

INCLUDE FILE FOR NTM INTERFACE

TEXT EDITOR Include File Description

FILE NAME: STDTYP

PURPOSE: STANDARD TYPE DEFINITIONS

LANGUAGE: C

DESCRIPTION: _____

DESCRIPTION

THIS FILE ENSURES THAT THE FOLLOWING STANDARD TYPES ARE

AVAILABLE:

FLOAT - SINGLE PRECISION FLOAT - DOUBLE PRECISION FLOAT

DOUBLE

- 32 BIT (OR LARGER) SIGNED INTEGER LONG

LBITS - 32 BITS (OR MORE) FOR BIT MANIPULATION

- NATURAL SIZE SIGNED INTEGER UNSIGNED - NATURAL SIZE UNSIGNED INTEGER

- NATURAL SIZE LOGICAL (ZERO / MON-ZERO ONLY) BOOL

- 16 BIT (OR LARGER) SIGNED INTEGER SHORT - 16 BIT (OR LARGER) UNSIGNED INTEGER USHORT BITS - 16 BITS (OR MORE) FOR BIT MANIPULATION

CHAR - SINGLE MACHINE CHARACTER (REAL CHARACTERS ALWAYS POSITIVE)

- 8 BIT (OR LARGER) SIGNED INTEGER TINY

- 8 BIT (OR LARGER) UNSIGNED INTEGER UTINY - 8 BITS (OR MORE) FOR BIT MANIPULATION TBITS

- 8 BIT (OR LARGER) LOGICAL (ZERO / MON-ZERO TBOOL

ONLY)

METACHAR - 16 BIT (OR LARGER) AUGMENTED CHARACTER (SIGNED)

- FUNCTION THAT RETURNS NO VALUE VOID

- STORAGE CLASS FOR FOREIGN (NON-C) ROUTINES FORTRAN

OR C ROUTINES

WHICH ARE CALLABLE FROM FOREIGN ROUTINES

SINCE NOT ALL COMPILERS SUPPORT USHORT, TINY, AND UTINY, THE FUNCTIONS

USHORT(), TINY(), AND UTINY() SHOULD BE USED WHENEVER REFERENCING THEM.

IN ADDITION, THE FOLLOWING UTILITY MACROS ARE DEFINED:

LURSHIFT(N, B) - UNSIGNED LONG RIGHT SHIFT

HAX(A, B) - MAXIMUM OF A AND B HIN(A, B) - MINIMUM OF A AND B

TEXT EDITOR Include File Description

ABS(A) - ABSOLUTE VALUE OF A

STRASN(A, B) - TRANSPORTABLE A = B FOR STRUCTURES

NULL - NULL POINTER VALUE (0)

TRUE - 1 FALSE - 0

SUCCESS - EXIT(SUCCESS) INDICATES SUCCESSFUL

COMPLETION

FAILURE - EXIT(FAILURE) INDICATES ERRORS

THE FOLLOWING SYMBOLS SHOULD BE DEFINED BASED ON THE COMPILER BEING USED:

USHORT - COMPILER SUPPORTS UNSIGNED SHORT

TINY - COMPILER TREATS CHAR AS SIGNED

UTINY - CHAR IS SIGNED AND COMPILER SUPPORTS

UNSIGNED CHAR

VOID - COMPILER SUPPORTS VOID FORTRAN - COMPILER SUPPORTS FORTRAN STRASN - DEFINE APPROPRIATE MACRO

SUCCESS - DEFINE APPROPRIATE VALUE IF NOT OF FAILURE - DEFINE APPROPRIATE VALUE IF NOT 1

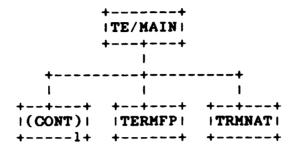
3.10.10 Hierarchy Chart

The following hierarchy charts show the relationships between all of the modules mentioned in the above documentation. A module may call a subroutine several times within its code, but the call will only be shown once as a single relationship on this hierarchy chart. All modules shown at the top of the first page are considered Main Programs as described in section 3.10.1 above.

There is an internal paging scheme as marked by the numbers in the upper right corner of each page. An index after the last page of the chart shows where a routine and its calls are first defined. If a routine has no page reference, it either makes no calls or is an external routine. A continuation box on the end of a tree limb shows where that the tree continues on the page numbered mentioned. A number in a box with a routine name points to the page where the routine is further defined within the hierarchy tree. If there is no number in a box, the routine either makes no calls or is an external routine.

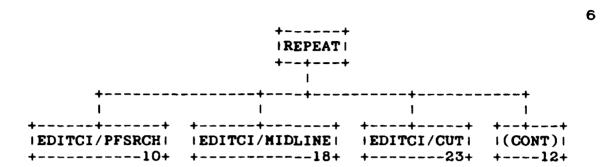
1





+----+ | EDITCI | +--+---+ | (CONT) | | STRCPY | | | EDITCI/DOCMD| | (CONT)| +---2+ INAME IREPEAT | MARGIN | | REPLACE | | CLEAR | I (CONT) I +----7+ +----9+ +----6+ +----8+ | MEMCPY | IOTAL +----+

5



7

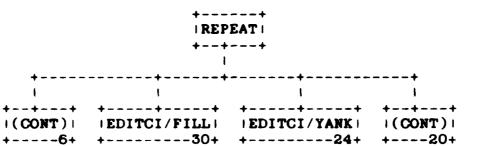
8

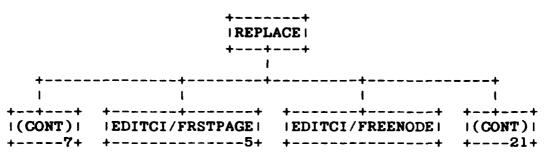
9

|EDITCI/DOCMD| (CONT) I(CONT) | ISAVE | | SEARCH | | LOAD | | PMSGLS | +--+--+ +--16+ +----+ +---17+ +----4+ +--15+ +----+ +--+--+ |EDITCI/INDEX| |STRLEN| | MEMCPY | +----38+ +----+ +----+

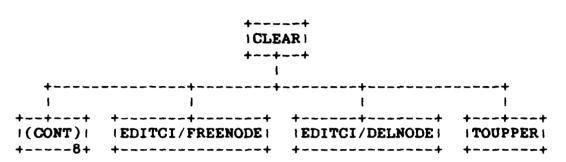
3-136

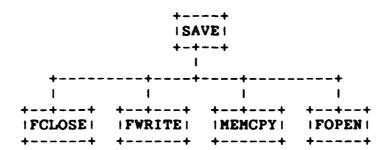
3-137

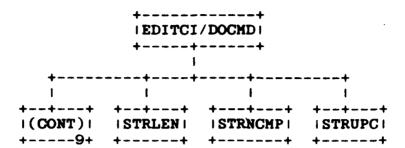


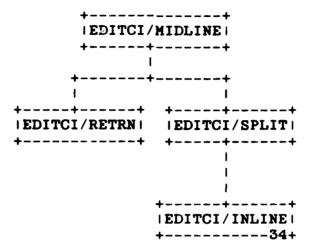


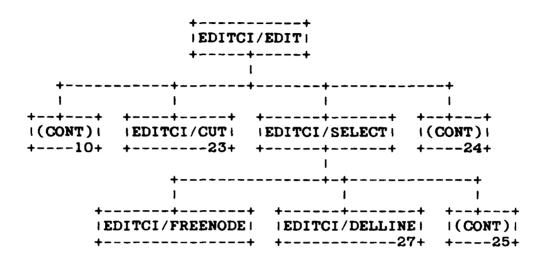
14



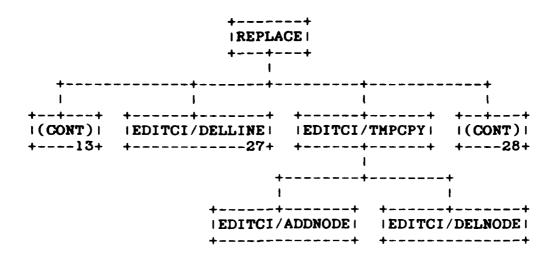


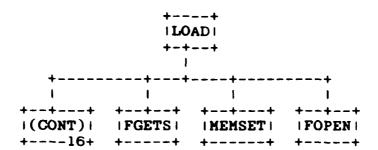


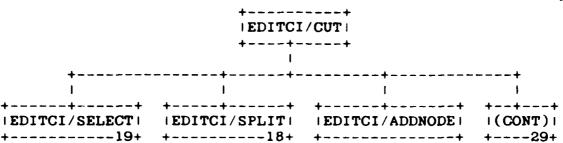


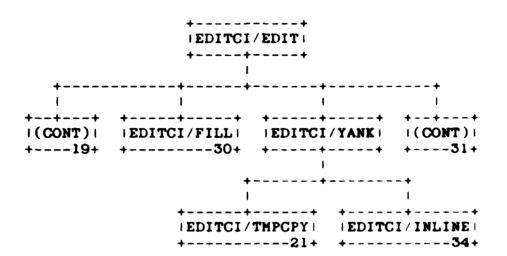


3-146



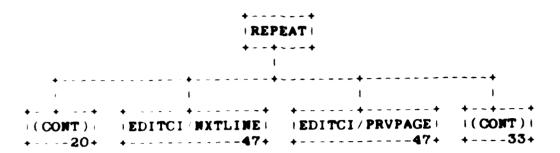


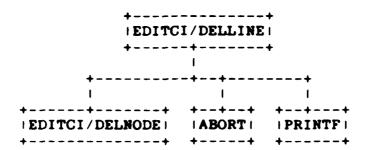




25

26

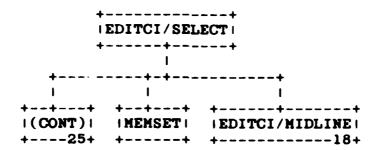




30

3-156

3-157



+---39+

33 | REPEAT | +----+ |EDITCI/DOCMD| (CONT)

(CONT)

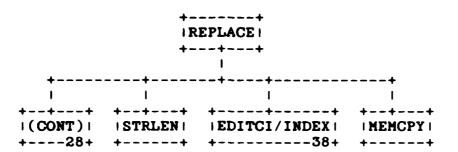
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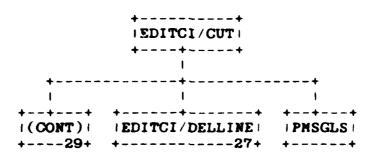
|EDITCI/NXTPAGE|

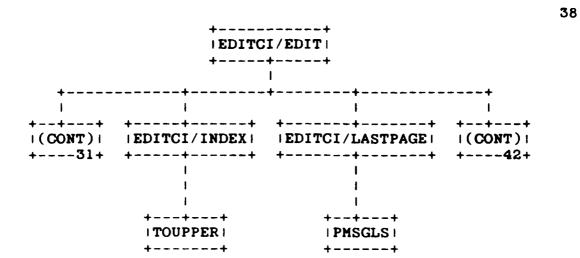
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3-159

34



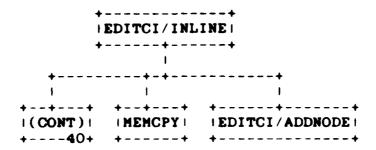




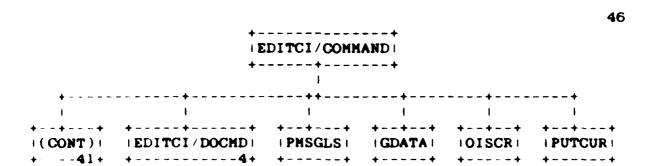
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3-168

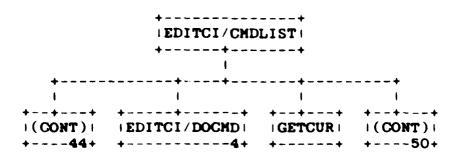
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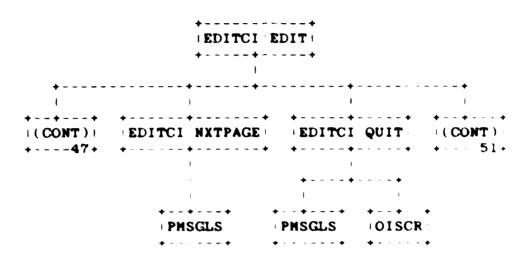


 $3 \cdot 171$

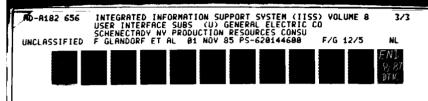


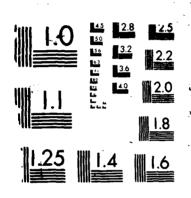
47



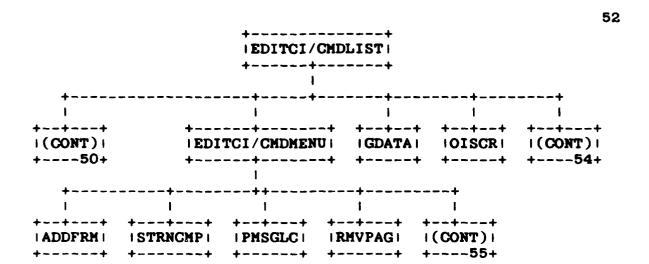


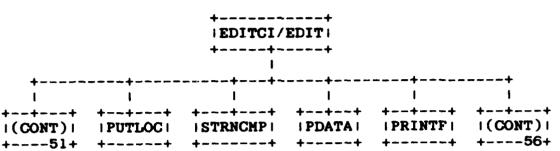
3-176

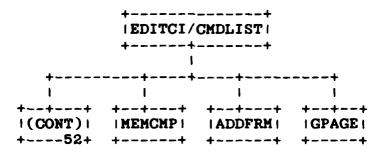


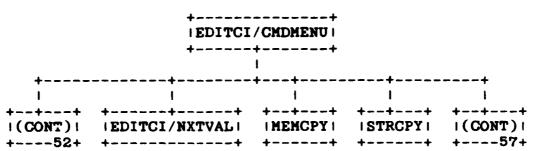


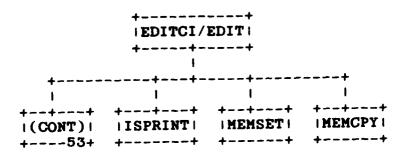
MICROCOPY RESOLUTION TEST CHART NATIONAL HUBERT OF STANDARDS 1964 A

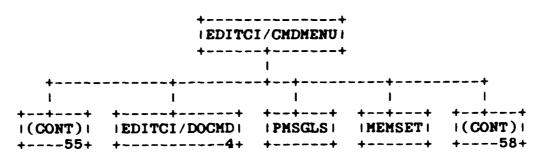


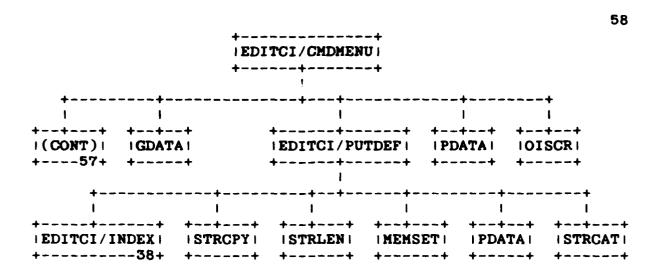












ABORT		INITFP
ADDFRM		ISPRINT
ATOI		LOAD16
CLEAR	8	MALLOC
EDITCI	. 2	MARGIN4
EDITCI/ADDNODE		MEMCMP
EDITCI/CMDLIST3	59	MEMCPY
EDITCI/CMDMENU5	52	MEMSET
EDITCI/COMMAND3		NAME4
EDITCI/CUT2		OISCR
EDITCI/DELLINE2	27	PDATA
EDITCI/DELNODE		PMSGLC
EDITCI/DOCMD		PMSGLS
EDITCI/EDIT		PRINTF
EDITCI/FILL	30	PUTATT
EDITCI/FREENODE	_	PUTCUR
EDITCI/FRSTPAGE		PUTLOC
EDITCI/GETNODE		REPEAT6
EDITCI/INDEX		REPLACE7
EDITCI/INLINE		RMVPAG
EDITCI/LASTPAGE		SAVE
EDITCI/MIDLINE		SEARCH9
EDITCI/NEWLINE		STRCAT
EDITCI/NXTLINE4		STRCPY
EDITCI/NXTPAGE	49	STRLEN
EDITCI/NXTVAL		STRNCAT
EDITCI/PFSRCH		STRNCMP
EDITCI/PRVLINE		STRUPC
EDITCI/PRVPAGE		TE/MAIN1
EDITCI/PUTDEF		TERMFP
EDITCI/QUIT	49	TOUPPER
EDITCI/RETRN		TRMNAT
EDITCI/SELECT		
EDITCI/SPLIT		
EDITCI/TMPCPY		
EDITCI/YANK	24	
ESCPY		
FCLOSE		
FGETS		
FOPEN		
FWRITE		
GDATA		
GETCUR		
GETHORE		
GPAGE		
GWINDO		
INITAL		

3.11 Program Listings Comments

This information is contained in the Module Descriptions in section 3.10.

SECTION 4

QUALITY ASSURANCE PROVISIONS

4.1 Introduction and Definitions

"Testing" is a systematic process that may be preplanned and explicitly stated. Test techniques and procedures may be defined in advance, and a sequence of test steps may be specified. "Debugging" is the process of isolation and correction of the cause of an error.

"Antibugging" is defined as the philosophy of writing programs in such a way as to make bugs less likely to occur and when they do occur, to make them more noticeable to the programmer and the user. In other words, as much error checking as is practical and possible in each routine should be performed.

4.2 Computer Programming Test and Evaluation

The quality assurance provisions for test consists of the normal testing techniques that are accomplished during the construction process. They consist of design and code walk-throughs, unit testing, and integration testing. These tests are performed by the design team. Structured design, design walk-through and the incorporation of "antibugging" facilitate this testing by exposing and addressing problem areas before they become coded "bugs."